In re: Sumakeris et al. Appl. Serial No. 10/046,346 Filed: October 26, 2001 Page 11

### REMARKS

The Applicants appreciate the courtesy extended by the Examiner in the March 2, 2004 interview and the thorough review of this application. In response, the Applicants respectfully submit the enclosed amendments.

The Applicants cancel without prejudice Claims 1-6, 15, 20-48, and 50-51. The Applicants amend Claims 7, 11, 12, 14, 16, 18. Claims 8, 9, 10, 13, 17, 19, and 49 are unchanged.

New Claims 52-80 have been added in response to the Examiner's remarks.

# Information Disclosure Statement

The Applicants include with this response and amendment a Supplemental Information Disclosure Statement. The Applicants respectfully request that U.S. Patent No. 6,100,111 listed on the Supplemental IDS be considered by the Examiner and made of record in this application.

## Rejection under 35 U.S.C. 112

Pending Claim 11 was previously rejected under the first and second paragraphs of 35 U.S.C. 112. The Applicants have amended Claim 11 to comply with the original Specification Page 15, Paragraph [0057], as requested by the Examiner.

# Further Comments

In the December 12, 2003 Office Action (Paper No. 13), the Examiner rejected pending Claims 1–14, 19–45, 50 and 51. The Examiner only objected to Claims 15–18 and 49, stating that these claims would be allowable over the art of record if the claims were placed in independent form. The Examiner suggested forming independent claims including all of the limitations of Claims 7 and 15, Claims 7 and 17, Claims 7 and 18, as well as Claims 7, 10, and 49.

In re: Sumakeris et al. Appl. Serial No. 10/046,346 Filed: October 26, 2001

Page 12

In this regard, the Applicants amend Claim 7 to incorporate the recitations of Claim 15. The dependant claims referring back to Claim 7 have also been amended as necessary. Claim 16 previously had a misprint that has been corrected.

New independent Claim 52 incorporates Claim 17 into the recitations of Claim 7 to define a p-n diode according to the invention herein. Appropriate dependant Claims 53-63 are also added.

New independent Claim 64 incorporates Claim 18 into the recitations of Claim 7 to define another embodiment of the p-n diode in accordance with the Examiner's remarks. Dependent Claims 65–70 are also added.

New independent Claim 71 is based upon the recitations of original Claim 7 and objected Claim 49. Dependent Claims 72-80 are also added.

### Conclusions

In light of the foregoing amendments, the Applicants consider the amended claims to be in condition for immediate allowance. The Applicants respectfully request that the Examiner reconsider the currently standing rejections and issue a favorable response to this submission.

Respectfully submitted,

R. Brian Johnson Reg. No. 45,951

021176
SUMMA & ALLAN, P.A.
11610 North Community House Road
Suite 200, Ballantyne Corporate Park
Charlotte, NC 28277-2162

Phone: 704-945-6715 Fax: 704-945-6735

SAFIRM DOCS\5000\221\Resp-Amd051204.doc